CLAIMS

What is claimed is:

1   Claim 1 is deleted.

2   Claim 2 is deleted.

3   Claim 3 is deleted.

4   Claim 4 is deleted.

5   Claim 5 is deleted.

6   Claim 6 is deleted.

7   Claim 7 is deleted.

8   Claim 8 is deleted.

9   Claim 9 is deleted.

10 Claim 10 is deleted.

11 (Currently amended) A computer implemented process for content-based images verification, identification, retrieval, and classification with software components, which use IVI-API as an application-programming inte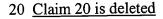rface. A computer implemented process of claim 1 and 3 (search and classification), wherein the steps of setting parameters comprises the "Area of Interest", which specifies an image segment, which is specified by 4 numbers: the coordinates of the upper-left corner and the bottom-right corner and obtained in two clicks.

12 Claim 12 is deleted.

13 Claim 13 is deleted.

14 (Currently amended) A computer implemented process ~~of claim 1 and 3~~, <u>wherein the steps of specifying parameters</u> ~~wherein the steps of setting parameters~~ comprises ~~the~~ Sensitivity, ~~or whatever the terminology used,~~ which defines a distance between two neural ABM nets generated by two images in a connection space such that the distance can be used to eliminate unmatched images. ~~A computer implemented process of claim 1 and 3 (search and classification), wherein the steps of setting parameters comprises the "Sensitivity", which deals with the sample segment size, high sensitivity is for small segment(s) and low sensitivity is for large segment(s).~~

15 (Currently amended) A computer implemented process ~~of claim 1 and 3~~, <u>wherein the steps of specifying parameters</u> ~~wherein the steps of setting parameters~~ comprises ~~the~~ Blurring, ~~or whatever the terminology used,~~ which measures <u>a</u> ~~the~~ distortion due to data compression, Translation, Rotation, Scaling, Intensity change, <u>or</u> ~~and~~ image format conversion and which is implemented by enlarging a single image, <u>viewed as a point in a image space where distances are defined,</u> to a set of images by using ~~the Hausdorff distance, or L1 distance, or L2 distance, or~~ multiple distances that define ~~distances define~~ the radius of the set. ~~A computer implemented process of claim 1 and 3 (search and classification), wherein the steps of setting parameters comprises the "Blurring", which measure the distortion due to data compression, translation, rotation, scaling, intensity change, and image format conversion, or combination there of.~~

16 (Currently amended) A computer implemented process ~~of claim 1 and 3~~, <u>wherein the steps of specifying parameters</u> ~~wherein the steps of setting parameters~~ comprises ~~the~~ Shape Cut, ~~or whatever the terminology used,~~ which defines a distance between two images in an image space such that the distance can be used to eliminate unmatched images. ~~A computer implemented process of claim 1 and 3 (search and classification), wherein the steps of setting parameters comprises the "Shape Cut", which eliminates many images that have different shapes as the sample segment.~~

17 <u>Claim 17 is deleted.</u>

18 <u>Claim 18 is deleted.</u>

19 Currently amended) <u>The ABM learning algorithm; the APN learning algorithm; the ABM recognition algorithm, which classify images via the stable distributions of the Markov chains; and the APN recognition algorithm, which extends ABM algorithm for binary neural nets to multi-valued neural nets by computing a distance between the two images.</u> ~~A computer implemented process of claim 1 and 3 (search and classification), wherein the neural layer deploys the ABM or/and APN algorithm.~~

20 <u>Claim 20 is deleted</u>

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25 <u>Claim 25 is deleted.</u>

26 <u>Claim 26 is deleted.</u>

27 <u>Claim 27 is deleted.</u>

28 <u>Claim 28 is deleted.</u>